Applicant | Michael H. Jones Attorney's Docket No.: 14875-068002 / C2-001PCT-USD1

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Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1-31 (Cancelled)

32. (Previously Presented) An isolated nucleic acid consisting of SEQ ID NO:2 or SEQ ID

NO:9.

33. (Previously Presented) An isolated nucleic acid comprising SEQ ID NO:2 or SEQ ID

NO:9.

34. (Previously Presented) An isolated nucleic acid encoding a polypeptide comprising a

sequence as set forth in SEQ ID NO:1 or 10.

35. (Currently Amended) An isolated nucleic acid comprising a strand that hybridizes under

high stringency stringent conditions to a single stranded probe, the sequence of which probe consists of SEQ ID NO:2 or 9 or the complement thereof, wherein the nucleic acid encodes a polypertide that contains at least one bromodomain and binds to a protein selected from the

group consisting of hSNF2H, hSNF2L, and NCoA-62/Skip, and wherein the high-stringency

stringent conditions comprise hybridization and washing at 50 °C and-washing in 2X SSC

containing 0.1% SDS.

36. (Previously Presented) The nucleic acid of claim 35, wherein the polypeptide comprises a

sequence of as set forth in SEQ ID NO:1 or 10.

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37. (Previously Presented) The nucleic acid of claim 35, wherein the strand is at least 3000 nucleotides in length.

Claims 38-39. (Canceled)

- 40. (Previously Presented) A vector comprising the nucleic acid of claim 32.
- 41. (Previously Presented) A vector comprising the nucleic acid of claim 33.
- 42. (Previously Presented) A vector comprising the nucleic acid of claim 34.
- 43. (Previously Presented) A vector comprising the nucleic acid of claim 35.
- 44. (Previously Presented) A cultured host cell comprising the nucleic acid of claim 32.
- 45. (Previously Presented) A cultured host cell comprising the nucleic acid of claim 33.
- 46. (Previously Presented) A cultured host cell comprising the nucleic acid of claim 34.
- 47. (Previously Presented) A cultured host cell comprising the nucleic acid of claim 35.
- 48. (Previously Presented) A method of producing a polypeptide, the method comprising culturing the cultured host cell of claim 44 in a culture, expressing the polypeptide encoded by the nucleic acid in the cultured host cell, and isolating the polypeptide from the culture.
- 49. (Previously Presented) An isolated nucleic acid encoding a polypeptide the sequence of which comprise the amino acid sequence of SEQ ID NO:1 or SEQ ID NO:10 with 0 to 50 conservative amino acid substitutions, wherein the polypeptide binds to a protein selected from the group consisting of hSNF2H, hSNF2L, and NCoA-62/Skip.

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50. (Previously Presented) The isolated nucleic acid of claim 49, wherein the number of

conservative amino acid substitutions is 0 to 30.

51. (Previously Presented) The isolated nucleic acid of claim 49, wherein the number of

conservative amino acid substitutions is 0 to 10.

52. (Previously Presented) An isolated nucleic acid comprising a nucleotide sequence that is

at least 70% homologous to SEQ ID NO:2 or SEQ ID NO:9, wherein the nucleic acid encodes a

polypeptide that contains at least one bromodomain and binds to a protein selected from the

group consisting of hSNF2H, hSNF2L, and NCoA-62/Skip.

53. (Previously Presented) The isolated nucleic acid of claim 52, wherein the nucleotide

sequence is at least 90% homologous to SEQ ID NO:2 or SEQ ID NO:9.

54. (Previously Presented) The isolated nucleic acid of claim 52, wherein the nucleotide

sequence is at least 95% homologous to SEQ ID NO:2 or SEQ ID NO:9.

55. (Previously Presented) An isolated nucleic acid comprising a sequence that encodes a

polypeptide the amino acid sequence of which is at least 60% identical to SEQ ID NO:1 or SEQ

ID NO:10, wherein the polypeptide contains at least one bromodomain and binds to a protein

selected from the group consisting of hSNF2H, hSNF2L, and NCoA-62/Skip.

56. (Previously Presented) The isolated nucleic acid of claim 55, wherein the amino acid

sequence is at least 80% identical to SEQ ID NO:1 or SEQ ID NO:10.

57. (Previously Presented) The isolated nucleic acid of claim 55, wherein the amino acid

sequence is at least 95% identical to SEQ ID NO:1 or SEQ ID NO:10.

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58. (Previously Presented) The isolated nucleic acid of claim 49, wherein the number of conservative amino acid substitutions is 0 to 3.

- 59. (Previously Presented) The isolated nucleic acid of claim 52, wherein the nucleotide sequence is at least 80% homologous to SEQ ID NO:2 or SEQ ID NO:9.
- 60. (Previously Presented) A vector comprising the nucleic acid of claim 49.
- 61. (Previously Presented) A vector comprising the nucleic acid of claim 52.
- 62. (Previously Presented) A vector comprising the nucleic acid of claim 55.
- 63. (Previously Presented) A cultured host cell comprising the nucleic acid of claim 49.
- 64. (Previously Presented) A cultured host cell comprising the nucleic acid of claim 52.
- 65. (Previously Presented) A cultured host cell comprising the nucleic acid of claim 55.
- 66. (Previously Presented) A method of producing a polypeptide, the method comprising culturing the cultured host cell of claim 63 in a culture, expressing the polypeptide encoded by the nucleic acid in the cultured host cell, and isolating the polypeptide from the culture.
- 67. (Previously Presented) A method of producing a polypeptide, the method comprising culturing the cultured host cell of claim 64 in a culture, expressing the polypeptide encoded by the nucleic acid in the cultured host cell, and isolating the polypeptide from the culture.

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68. (Previously Presented) A method of producing a polypeptide, the method comprising culturing the cultured host cell of claim 65 in a culture, expressing the polypeptide encoded by the nucleic acid in the cultured host cell, and isolating the polypeptide from the culture.

69. (New) An isolated nucleic acid comprising a strand that hybridizes under stringent conditions to a single stranded probe, the sequence of which probe consists of SEQ ID NO:2 or SEQ ID NO:9 or the complement thereof, wherein the nucleic acid is at least 70% homologous to SEQ ID NO:2 or SEQ ID NO:9, wherein the nucleic acid encodes a polypeptide that contains at least one bromodomain and binds to a protein selected from the group consisting of hSNF2H, hSNF2L, and NCoA-62/Skip, and wherein the stringent conditions comprise hybridization and washing at 50°C in 2X SSC containing 0.1% SDS.

70. (New) The isolated nucleic acid of claim 69, wherein the nucleic acid is at least 80% homologous to SEQ ID NO:2 or SEQ ID NO:9.

71. (New) The isolated nucleic acid of claim 69, wherein the nucleic acid is at least 90% homologous to SEQ ID NO:2 or SEQ ID NO:9.

72. (New) An isolated nucleic acid comprising a strand that hybridizes under stringent conditions to a single stranded probe, the sequence of which probe consists of SEQ ID NO:2 or SEQ ID NO:9 or the complement thereof, wherein the nucleic acid encodes a polypeptide the amino acid sequence of which is at least 60% identical to SEQ ID NO:1 or SEQ ID NO:10 and contains at least one bromodomain and binds to a protein selected from the group consisting of hSNF2H, hSNF2L, and NCoA-62/Skip, and wherein the stringent conditions comprise hybridization and washing at 50°C in 2X SSC containing 0.1% SDS.

 (New) The isolated nucleic acid of claim 71, wherein the amino acid sequence is at least 80% identical to SEQ ID NO:1 or SEQ ID NO:10.